Additional educational resources

Useful website

Center for Outcomes Research (www.dvt.org)-useful information for professionals, with links to other sites and access to some research papers

Information for patients

Investigators against thromboembolism (www.inate.org)-useful website for professionals and patients, with links to other sites www.heartonline.com—useful website for professionals and patients, with information on cardiovascular disease and its risk factors and links to other sites

has been shown in the development of new antithrombotic agents, as shown by the progress from unfractionated heparin to the low molecular weight heparins and thence, fondaparinux and similar agents. Although aspirin and clopidogrel have their place, particularly in arterial thrombosis, development of new anticoagulants focuses on targeting the coagulation pathway-for example, thrombin and factor Xa. As a class, the direct thrombin inhibitors (hirudin, ximelagatran, dabigatran) are beginning to find their place in situations where heparin use is limited, and some may eventually replace warfarin.29 Like fondaparinux, idraparinux is a heparinoid pentasaccharide, but the long half-life of the latter (80 hours) means it may be given once weekly.29

Competing interests: ADB and GYHL have received research grants, sponsorship, and hospitality from Astra Zeneca, Glaxo-SmithKline, and Sanofi-Aventis.

- $1\quad Ho\ WK, Hankey\ GJ, Lee\ CH, Eikelboom\ JW.\ Venous\ thromboembolism:$ diagnosis and management of deep vein thrombosis. Med J Aust 2005:182:476-81.
- Lee CH, Hankey GJ, Ho WK, Eikelboom JW. Venous thromboembolism: diagnosis and management of pulmonary embolism. Med J Aust 2005;182:569-74.
- Stein PD, Terrin ML, Hales CA, Palevsky HI, Saltzman HA, Thompson Stein PD, Terrin ML, Hales CA, Palevsky HI, Saltzman HA, Inompson BT, et al. Clinical, laboratory, roentgenographic and electrocardiographic findings in patients with acute pulmonary embolism and no pre-existing cardiac or pulmonary disease. Chest 1991;100:598.
 Turpie AGG, Chin BSP, Lip GYH. Venous thromboembolism: pathophysiology, clinical features and prevention. In: Lip GYH, Blann AD, eds. ABC of antithrombotic theraty. London: BMJ Books, 2003.
 Garcia D, Ageno W, Libby E. Update on the diagnosis and management of pulmonary embolism. Br J Haematol 2005;131:301-12.

- White RH. The epidemiology of venous thromboembolism. *Circulation* 2003;107(suppl 1):I4-8.
- Petrauskiene V, Falk M, Waernbaum I, Norberg M, Eriksson JW. The risk of venous thromboembolism is markedly elevated in patients with diabetes. Diabetologia 2005;48:1017-21.

- 8 Hansson PO, Eriksson H, Welin L, Svardsudd K, Wilhelmsen L. Smoking and abdominal obesity: risk factors for venous thromboembolism among middle-aged men: "the study of men born in 1913." Arch Intern Med 1999;159:1886-90.
- 9 Anderson FA Jr, Spencer FA. Risk factors for venous thromboembolism.
 Circulation 2003;107(suppl 1):19-16.
 10 Lip GY, Chin BS, Blann AD. Cancer and the prothrombotic state. *Lancet*
- Oncol 2002:3:27-34.
- White RH, Chew HK, Zhou H, Parikh-Patel A, Harris D, Harvey D, et al. Incidence of venous thromboembolism in the year before the diagnosis of cancer in 528 693 adults. *Arch Intern Med* 2005;165:1782-7.
- 12 Petralia GA, Lemoine NR, Kakkar AK, Mechanisms of disease; the impact of antithrombotic therapy in cancer patients. Nat Clin Pract Oncol 2005:2:356-63
- 13 Crowther MA, Kelton JG. Congenital thrombophilic states associated with venous thrombosis: a qualitative overview and proposed classification system. *Ann Intern Med* 2003;138:128-34.
- 14 Bertina RM. Elevated clotting factor levels and venous thrombosis. Patho-physiol Haemost Thromb 2004;33:395-400.
- 15 Wu O, Robertson L, Langhorne P, Twaddle S, Lowe GD, Clark P, et al. Oral contraceptives, hormone replacement therapy, thrombophilias and risk of venous thromboembolism: a systematic review. The thrombosis: risk and economic assessment of thrombophilia screening (TREATS) study. Thromb Haemost 2005;94:17-25.
- 16 Gomes MP, Deitcher SR. Risk of venous thromboembolic disease associated with hormonal contraceptives and hormone replacement therapy: a clinical review. *Arch Intern Med* 2004;164:1965-76.
- Buller HR, Sohne M, Middeldorp S. Treatment of venous thromboembolism. J Thromb Haemost 2005:3:1554-60.
- 18 Hirsch J, Guyatt G, Albers G, Schunemann JH, Munger H, Brower S, et al. Seventh ACCP conference on anti-thrombotic and thromboembolic therapy. *Chest* 2004;126(suppl 3):S172-696.
- 19 Haemostasis and Thrombosis Task Force of the British Society for Haematology. Guidelines on anticoagulation: third edition. Br J Haematol 1998:101:374-87.
- 20 Ost D, Tepper J, Mihara H, Lander O, Heinzer R, Fein A. Duration of anticoagulation following venous thromboembolism: a meta-analysis. *JAMA* 2005;294:706-15.
- 21 Lee AYY. Management of thrombosis in cancer: primary prevention and
- secondary prophylaxis. Br J Haematol 2004;128:291-302.

 22 Mismetti P, Laporte S, Zufferey P, Epnat M, Decousus H, Cucherat M. Prevention of venous thromboembolism in orthopaedic surgery with vitamin K antagonists: a meta-analysis. *J Thromb Haemostas* 2004;2:1058-70.
- 23 Buller HR, Davidson BL, Decousus H, Gallus A, Gent M, Piovella F, et al. Subcutaneous fondaparinux versus intravenous unfractionated heparin in the initial treatment of pulmonary embolism. N Engl J Med 2003;349:1695-702.
- 24 Buller HR, Davidson BL, Decousus H, Gallus A, Gent M, Piovella F, et al. Fondaparinux or enoxaparin for the initial treatment of symptomatic deep venous thrombosis: a randomized trial. *Ann Intern Med* 2004;140:867-73.
- 25 Turpie AG, Bauer KA, Eriksson BI, Lassen MR. Fondaparinux vs enoxaparin for the prevention of venous thromboembolism in major orthopedic surgery: a meta-analysis of 4 randomized double-blind studies. *Arch Intern Med* 2002;162:1833-40.
- 26 Gordois A, Posnett J, Borris L, Bossuyt P, Jonsson B, Levy E, et al. The cost-effectiveness of fondaparinux compared with enoxaparin as prophylaxis against thromboembolism following major orthopedic
- surgery. J Thromb Haemost 2003;1:2167-74.
 27 Wolozinsky M, Yavin YY, Cohen AT. Pharmacological prevention of venous thromboembolism in medical patients at risk. Am J Cardiovasc Drugs 2005;5:409-15.
- Wong PS, Singh SP, Watson RD, Lip GY. Management of pulmonary thrombo-embolism using catheter manipulation: a report of four cases
- and review of the literature. Postgrad Med J 1999;75:737-41.
 29 Weitz JI, Bates SM. New anticoagulants. J Thromb Haemostas 2005:3;

(Accepted 22 December 2005)

So, those who can't do it, teach it?

It has been said that "He who can, does. He who cannot, teaches." I have often wondered whether there is any truth behind this frequently quoted expression, which surgical students hear from the early days of their clinical training. To find the answer, one must look at the origin of the phrase itself-back to the Irish playwright George Bernard Shaw (1903). Shaw, however, was referring to revolutionaries, not teachers. The phrase is, therefore, used out of context.

Most of us, looking back over our training, can attribute our choice of specialty to one or more mentors—teachers so enthusiastic and inspirational that they instilled within us the desire to better ourselves and thereby better serve our patients. They taught us to think for ourselves. Most of us will also admit that these inspiring individuals were not just devoted teachers but had notably inquiring minds and were almost always exceptional clinicians

Charles H Mayo (1865-1939), one of the founders of the internationally renowned Mayo Clinic, once said: "The safest thing for a patient is to be in the hands of a man involved in teaching medicine. In order to be a teacher of medicine the doctor must always be a student." Therefore, the next time you hear Shaw quoted out of context, perhaps you might respond by quoting Mayo, a man described not only as an inspirational teacher but also as a "surgical wonder."

Perhaps those who don't teach it can't do it as well as they

Farhad B Naini consultant in facial deformity, St George's Hospital and Medical School, London (farhad@naini.freeserve.co.uk)